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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,437

01/18/2005

Franco Burco

NOTAR-019US

3675

7663

7590

09/15/2006

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75 ENTERPRISE, SUITE 250  
ALISO VIEJO, CA 92656

EXAMINER

LARSON, LOWELL A

ART UNIT

PAPER NUMBER

3725

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/522,437

Applicant(s)

BURCO ET AL.

Examiner

Lowell A. Larson

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4 to 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4 to 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

2. Claims 1 and 4 to 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al. in view of Noda for the reasons set forth in Paragraph 2 of the last Office action (paper mailed March 13, 2006) and further in view of Engel et al. ('799), newly cited, and Kishikawa et al. ('699), cited in the IDS filed April 4, 2005.

As set forth in the last Office action it would have been obvious to one skilled in the art to space the compact intermediate rolling group of Muller et al. such that the entire stock bar is acted on simultaneously by all three stands and a finishing stand is located at a distance from the compact group such that the bar is processed in that stand independently of the compact group, following the suggestion of Noda, in order to avoid excessive cooling, and find optimum pass schedules for any specific rolling conditions and desired product characteristics.

The claims now require the edging stand to be a two-high edging stand. Applicant's assertion in the remarks filed July 31, 2006 that the prior art fails to disclose a two-high edging stand is erroneous. Edging stand A<sub>2</sub> shown in Figure 1 of Noda is clearly a two-high stand, i.e., consisting of only two opposed rolls, and to employ a conventional edging stand such as that in the compact group of Muller et al. would be an obvious expedient to one skilled in the art.

These claims further recite a first reduction ratio between 10 and 30% and a second reduction ration between 3 and 25%, with the first reduction ratio being larger than the second. Kishikawa et al. shows that reduction ratios in these ranges are conventional in rail rolling. See Tables I and II. Engel et al. discloses rail rolling such as that of the invention, and advises that the reduction ratio~~y~~ in the first universal stand should be greater than that in the second universal stand in order to reduce the wear of the second stand and, consequently, produce acceptable rolled products for a longer time. See column 3, lines 32 to 61 and Claim 5. To employ such knowledge, shown to be clearly present in the art, in the rolling of Muller et al. would be an obvious expedient to the ordinarily skilled practitioner in order to optimize the production of the facility.

3. Claims 17 and 18 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota in view of Noda for the reasons set forth in Paragraph 3 of the last Office action.

Applicant's remarks in the response filed July 31, 2006 have been considered but are not found to be persuasive. In particular, Applicant believes it would not be obvious to space the Kubota finishing stand a distance from the universal stands greater than the length of the rolled product because Kubota desires a shortened rolling line.

Applicant's observation is not persuasive because Kubota teaches obtaining a shortened line by employing a transversely shiftable edging roll pair rather than by adjusting the spacing of the roll stands. Thus, no lack of nexus is seen in spacing the Kubota universal stands and finishing stand by a distance greater than the length of the product, following the suggestion of Noda. Furthermore, it is noted that the relation

between the separation of the universal and finishing stands and length of the rolling stock is dependent essentially on the length of the stock being roller rather than on a particular spacing of the respective stands, and, therefore, is of little value in defining the parameters of the rolling plant itself.

As noted above, Noda discloses the edging stand A<sub>2</sub> to be a two-high stand, as now required by these claims. The Kubota schematic disclosure of Figure 7 also shows the edging stand to be a two-high stand.

#### ***Claim Rejections - 35 USC § 102***

4. Claims 13 to 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobyzev.

The rail and rolls disclosed in the Kobyzev figure clearly show every feature of the rolls and rail recited in these claims.

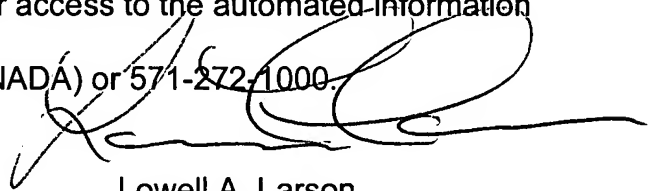
#### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kusaba further shows the notoriety of two-high edging stands in rail rolling. See column 1, lines 9 to 23.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lowell A. Larson whose telephone number is (571) 272-4519. The examiner can normally be reached from M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Lowell A. Larson', is written over the end of the paragraph.

Lowell A. Larson  
Primary Examiner  
Art Unit 3725

LAL  
September 13, 2006

# Replacement Sheet



1/4

Approved  
*[Signature]*

FIG. 1

